

# Highlights

- A personal analytics desktop for creating and contributing to plans
- A modern modeling environment for guided design and enterprise-scale deployment
- A powerful analytics engine for dynamic planning, forecasting and re-forecasting
- Distributed architecture to drive participation deep and wide
- Integration with powerful business
  intelligence and predictive analytics
- Alignment of financial and operational targets in one connected solution with unrivaled responsiveness
- Ownership and management by Finance and line-of-business users

# **IBM Cognos TM1**

Capabilities spanning personal, departmental and enterprise-wide planning and analysis, to improve alignment and drive dynamic decision-making throughout the organization

## **Overview**

Many Finance departments shortchange their strategy support, enterprise performance management and risk management activities because they're too busy reining in and validating data. They rely on systems—ranging from spreadsheets to ERP solutions—that are disconnected, expensive, completely managed by IT, and lack the performance and data reliability essential for on-demand analytics.

IBM Cognos® TM1® radically transforms planning, budgeting and forecasting. As a planning solution, it excels at providing immediate visibility into resource requirements and future business performance. It provides "what-if" scenario analytics for all participants and facilitates decision-making throughout the enterprise. With its distributed administrative capabilities, Cognos TM1 enables localized responsibility for plan processes across business units, functions and geographies—all in a single, secure planning environment.

With the full range of planning processes tied to the operational front lines, planners and analysts can uncover hidden business options, increase profits and manage capital more effectively. Cognos TM1 facilitates best practices such as driver-based planning, rolling forecasts and profitability analysis blended into planning. It elevates Finance's work to proactively managing the company's performance.



Cognos TM1 is the only enterprise planning and analytics solution that:

- Enables reliable, on-demand analysis, plans, forecasts and reports, and provides a holistic view of performance, including profitability
- Offers a choice of interfaces, including Microsoft Excel, to encourage high participation, and accommodate a broad range of work styles, business-specific personal analysis and options for collaboration
- Provides a managed, governed planning, analysis, and reporting process that spans personal, work group and enterprise requirements and is owned by Finance and line-of- business users.
- Provides a personal analytics desktop that combines analysis, planning, reporting and personal dashboarding in a single interface
- Features an innovative, guided modeling environment that eases development and deployment of planning, analysis and forecasting solutions
- Integrates with IBM Cognos Business Intelligence, to establish a single performance management platform that consolidates data from multiple sources and applications, and provides dynamic planning, analysis and performance reporting
- Offers a choice of distributed or centralized planning deployments for a range of users and activities
- Works in conjunction with dozens of Cognos Performance Blueprints—pre-configured templates that help transform essential processes quickly, at less cost and with less risk

With these capabilities, companies can become highly collaborative and adaptive. Analysts can develop models and link them to other models to form a cohesive system, and deploy their models to workgroups or users throughout the enterprise for contribution. Users in functions such as sales, marketing or HR can analyze planning results and explore alternative scenarios with an easy-to-use graphical interface. They can share plans in dashboards or reports, and prompt team members for comments and validation. Planning team members can also easily blend in complex profitability analysis or predictive analytics.

# Features and benefits of Cognos TM1

Cognos TM1 offers these unique capabilities:

- A platform and solutions design, which provides complete, rapid-response, enterprise-level planning and analysis
- Rapid development of flexible models, including profitability models—without batch processing
- · Guided deployment for end users
- Expandability beyond planning to include business intelligence and predictive and risk analytics, dashboards, scorecards and reports, including standard general ledger, accounts receivable and accounts payable reports
- What-if analysis of alternative forecasts reflected immediately in charts, reports and dashboards.
- Control by Finance, with business users managing their own work, and without the need for constant IT support

# IBM Cognos Insight: the new personal business analytics desktop

Cognos Insight, a new interface through which users can access Cognos TM1, transforms planning and analytics for the individual contributor, accommodating the nonspreadsheet user. Not locked in by spreadsheets, a planner can push the boundaries of participation as deeply and as widely as required—and halt the development of shadow planning systems that hinder cooperation. Users who are intimate with the operations of the business can examine causes, trends and options in greater depth, and develop plans that better reflect the complex dynamics of the business, spotlighting drivers that need to be incorporated into the planning process.

With Cognos Insight, users are empowered to freely explore new plan models. They can pull the data of their choice onto their desktop—from managed or personal sources and without the assistance of IT—and build plan prototypes with personalized dimensions and hierarchies, and run what-if scenarios on the plan data. They can dive deep into data to examine the profitability of the business, analyze hierarchies such as product families down to the SKU level or customer family sets, and view on-demand the effect of a costing change. The quick, easy development and experimentation with the plans is aided by intuitive gestures for exploration, instant re-calculations, and rich visualization.

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*Figure 1*: A planner adds comments to a plan published to the Cognos Insight workspace. The plan appears in an easy-to-customize dashboard where teams can dynamically examine it at as deep a level as needed, look at trends and formulate options that reflect the dynamics of the business.

To share planning ideas, users can collaborate with multiple groups throughout the enterprise by:

- Promoting their findings in a tailored dashboard in Cognos Business Insight for broad distribution
- Publishing the material to be read as a report in Cognos Business Intelligence
- Moving the plan to the Web as an application for either limited or widely distributed access

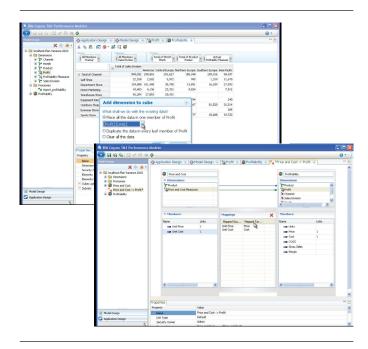
# Cognos TM1 Performance Modeler solution design and deployment

Cognos TM1 Performance Modeler, with its advanced modeling environment, provides the seasoned planner with a full array of analytics and model building tools as well as planning application deployment—all with unprecedented ease of use. Because Cognos TM1 Performance Modeler eases application design with its guided development process, planners can employ best practices such as:

- Driver-based planning and rolling forecasting, enhancing Finance's contribution to enterprise performance management
- · Broad involvement in the modeling process
- Frequent, rapid prototyping
- Deep linking of models to meet the broad range of enterprise planning and profitability analysis

Within Cognos TM1 Performance Modeler, the finance or business analyst can design a planning and analysis solution, such as an expense plan, or bring in an existing model from Cognos Insight. Designing the model includes:

- Defining new dimensions, such as units or pricing for a profitability model
- Building cubes such as sales planning or customer profitability analysis to support the planning requirements of business users
- Creating or modifying a calculation, aided with pre-configured calculation expressions
- Efficiently importing data from multiple sources, mapping it to the model with drag-and-drop gestures



*Figure 2*: With this innovative modeling environment suited for rapid, agile plan modeling, a planner can add dimensions to cubes or map dimensions across cubes or dimensions with point-and-click ease, especially helpful for more complex models.

With a user-friendly graphical interface, the analyst can link applications (or cubes) with simple drag-and-drop functionality, coupling financial resource management with operational performance commitments.

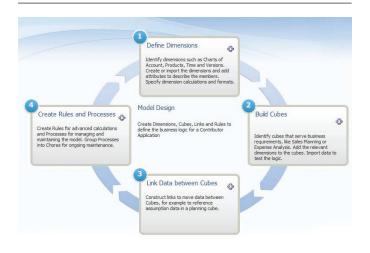


Figure 3: Guided modeling design engenders more modeling and scenarios, allowing more time for deep analysis as well as greater confidence in planning and forecasting.

Cognos TM1 Performance Modeler includes features such as:

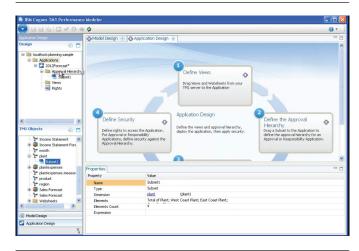
- Three dedicated panes for content, working area, and properties
- Wide use of drag-and-drop and WYSIWYG (what you see is what you get) functionality
- Dock-able editors
- Simple spreadsheet-like dimension calculations
- Graphical mapping for moving data between models and across dimensions within the models
- · An inter-editor refresh to highlight changes

# Solution deployment for planning, analytics and reporting

Cognos TM1 Performance Modeler also provides a process for deploying managed planning, analysis and reporting that spans personal, work group and enterprise requirements.

Cognos TM1 Performance Modeler helps increase user participation across departments and increase user commitment to achievable goals. Application design guides the planner through steps to set workflow, preferred client and application views and rights.

For planning contribution, Cognos TM1 Performance Modeler provides a broad array of application styles and interfaces through Cognos Insight and Cognos TM1 Web Sheets.



*Figure 4*: As part of the guided process for deploying a planning "application," a planner or administrator adds a subset to the planning application, defining the approval hierarchy.

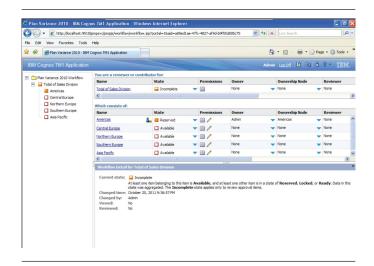


Figure 5: The workflow screen for planning – one option for governed planning.

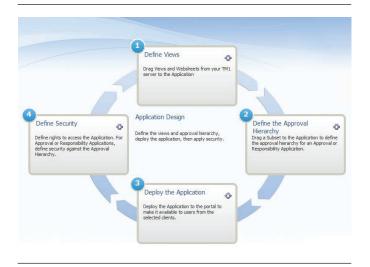


Figure 6: To enable a governed planning process, Cognos TM1 guides the planner or administrator through steps to set workflow, preferred client and application views and rights.

# Cognos Analytic Server – distributed architectural advances for scale and interactivity

Cognos Analytic Server lets an organization choose centralized or distributed deployment methods for its planning activities, depending upon the level of interactivity desired. The "thin client"—Cognos TM1 Web—supports centralized planning. The distributed process supports higher levels of planning participation.

The high-performance OLAP engine at the core of Cognos Analytic Server enables on-demand, in-memory analytics for large or complex data sets with real-time query and calculation performance. Users can analyze frequently changing data for millions of items, such as SKUs or transactions. For example, users can:

- Review sales daily or even hourly, by store, brand or sales representative
- Analyze day-by-day profitability and customer churn for thousands or even millions of customer accounts
- · Track trends in spending over weeks or months

The 64-bit OLAP technology of Cognos Analytic Server meets even the most complex, multi-dimensional analytics needs of large-scale operations, so a user can query data whenever he or she needs to—no matter how vast the data set may be. In addition, the user can view instant updates from streamed data and drill through to transaction systems for added context and thus greater accuracy in decision making.

To rapidly access valuable information locked away in back-office applications, Cognos Analytic Server includes data connectors that are shared with IBM Cognos Business Intelligence to streamline the loading of disparate data into models. A user can also create his or her own processes to automate data importation, metadata management and other tasks.

The Cognos TM1 Operations Console, a web-based tool, makes it easy to collectively manage Cognos TM1 servers on a daily basis. An administrator can dynamically monitor, sort and filter thread activity on Cognos TM1 servers, including monitoring threads running on multiple Cognos TM1 server instances. The Cognos TM1 Operations Console also provides a health check feature which determines the current state of each monitored server.

# **Technical Specifications**

#### **Operating Systems for TM1 Server**

- AIX 5.3, 6.1, 7.1
- Red Hat Enterprise Linux AS 5 on x86
- Solaris 10 (SPARC)
- Microsoft Windows 7, 7 SP1 (Professional & Ultimate)
- Microsoft Windows Server 2008 R2 Standard, 2008 Enterprise
- Microsoft Windows Vista SP2
- Microsoft Windows 2003 Server SP2 Standard Edition, 2003 Server SP2 64-bit
- Microsoft Windows XP Professional SP3

#### Supported Microsoft Excel Versions:

• Microsoft Excel 2003, 2007, 2010

#### Databases/OLAP Support

- Microsoft SQL Server 2005 Native, 2005 via DataDirect 5.3
- Microsoft SQL Server 2008, 2008 via DataDirect 5.3
- Microsoft Access 2003
- Oracle 9.2.0.1 via Oracle 9i client (Oracle 9i Release 2)
- Oracle 10g Release 1 via Oracle 10g R1 Client, 10g Release 2 via Oracle 10g R2 Client, 11g Release 1, 11g Release 2 - Windows/Linux/UNIX
- SAP BW 3.5, 3.5 (Unicode Instance)
- SAP NetWeaver 2004s BI, 7.0 EHP1
- Teradata V2R13.1
- Virtual View Manager 10.1

#### **BI Integration**

• IBM Cognos Business Intelligence V10.1.1, 10.1 FP1, 8.4.1 FP4

#### Web Browsers

- Microsoft Internet Explorer 7, 8 or 9
- Mozilla Firefox 3.5, 3.6, 4 or 5

#### **Application Servers**

- IBM WebSphere 7.0
- Apache Tomcat 6.0.18

#### Web Servers

• IIS 6, 7, 7.5

#### Cognos Insight Client

#### Operating Systems (both x86 & x64)

- Microsoft Windows 7,
- Microsoft Windows Vista SP2
- Microsoft Windows XP Professional SP3

#### Web Browsers

- Microsoft Internet Explorer 7, 8 or 9
- Mozilla Firefox 3.5, 3.6, 4 or 5



## **IBM Cognos TM1 features**

Cognos TM1 enhances your planning, analytics and related reporting processes with:

- **Personalized analysis and planning desktop.** A component that enables analytics, planning and reporting.
- **Innovation modeling.** Guided modeling and application design and deployment for planning, analysis, and forecasting
- Choice of interfaces. Spreadsheet, web, or Cognos Insight for non-spreadsheet users
- High performance analytics. Patented, 64-bit, in-memory OLAP for enterprise scalability and real-time scenario modeling to facilitate enterprise-wide planning and analysis.
- Security. Role-based security that supports multiple users and user types. Advanced predefined selection options ensure that users see only those portions of the plan that they need to.
- Microsoft Excel formatting on the web. All planners and stakeholders can read, write, perform "what-if" analysis and report with Microsoft Excel sheets right on the web.
- Administrative tools. Utilities for managing server performance and role-based access ease administrative tasks.
- **Global support.** Full Unicode support accommodates string lengths expanded beyond 255 characters. Language support for Japanese and simplified Chinese is included.
- Link to external applications. Because Cognos TM1 is Cognos 10 ready, you can link to enterprise reporting, scorecarding and other desktop applications so users can work with familiar interfaces.
- Connectors. Extend your ERP investments with the IBM Cognos data orchestration tool, which easily connects to data warehouses, Microsoft Excel worksheets or any ODBC-compliant databases.
- Cognos Performance Blueprints. Templates for improving your planning processes, optimizing the use of Cognos TM1 and reducing your time to value at less cost and with less risk.

### Conclusion

IBM Cognos TM1 provides a dynamic, collaborative solution to meet all of your enterprise planning and analytics needs. It excels at providing on-demand visibility to plans and forecasts, rapid what-if scenario modeling, and profitability analysis. And, when paired with IBM Cognos Business Intelligence V10.1, it addresses a breadth of reporting and scorecarding needs. With its personal analytics desktop and choice of centralized or distributed deployment methods, it revolutionizes comprehensive bottoms-up participation in the planning process. This innovative, cohesive enterprise system helps you take charge of your decision-making processes to uncover hidden business options, increase profits and manage capital effectively.

## **About IBM Business Analytics**

IBM Business Analytics software delivers actionable insights decision-makers need to achieve better business performance. IBM offers a comprehensive, unified portfolio of business intelligence, predictive and advanced analytics, financial performance and strategy management, governance, risk and compliance and analytic applications.

With IBM software, companies can spot trends, patterns and anomalies, compare "what if" scenarios, predict potential threats and opportunities, identify and manage key business risks and plan, budget and forecast resources. With these deep analytic capabilities our customers around the world can better understand, anticipate and shape business outcomes.

#### For more information

For further information or to reach a representative please visit **ibm.com**/analytics.

#### **Request a call**

To request a call or to ask a question, go to **ibm.com**/ **business-analytics/contactus**. An IBM representative will respond to your inquiry within two business days.



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